

ABSTRACT

A novel polynucleotide encoding a mammalian bifunctional protein kinase\endoribonuclease referred to herein as hlre1p, is provided. hlre1p is expressed in the endoplasmic reticulum (ER) and upregulates the transcription of genes encoding ER
5 protein chaperones, such as, but not limited to, glucose-related proteins (GRP's). Therapeutic, diagnostic and research methods employing the polynucleotide and protein are also provided.

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